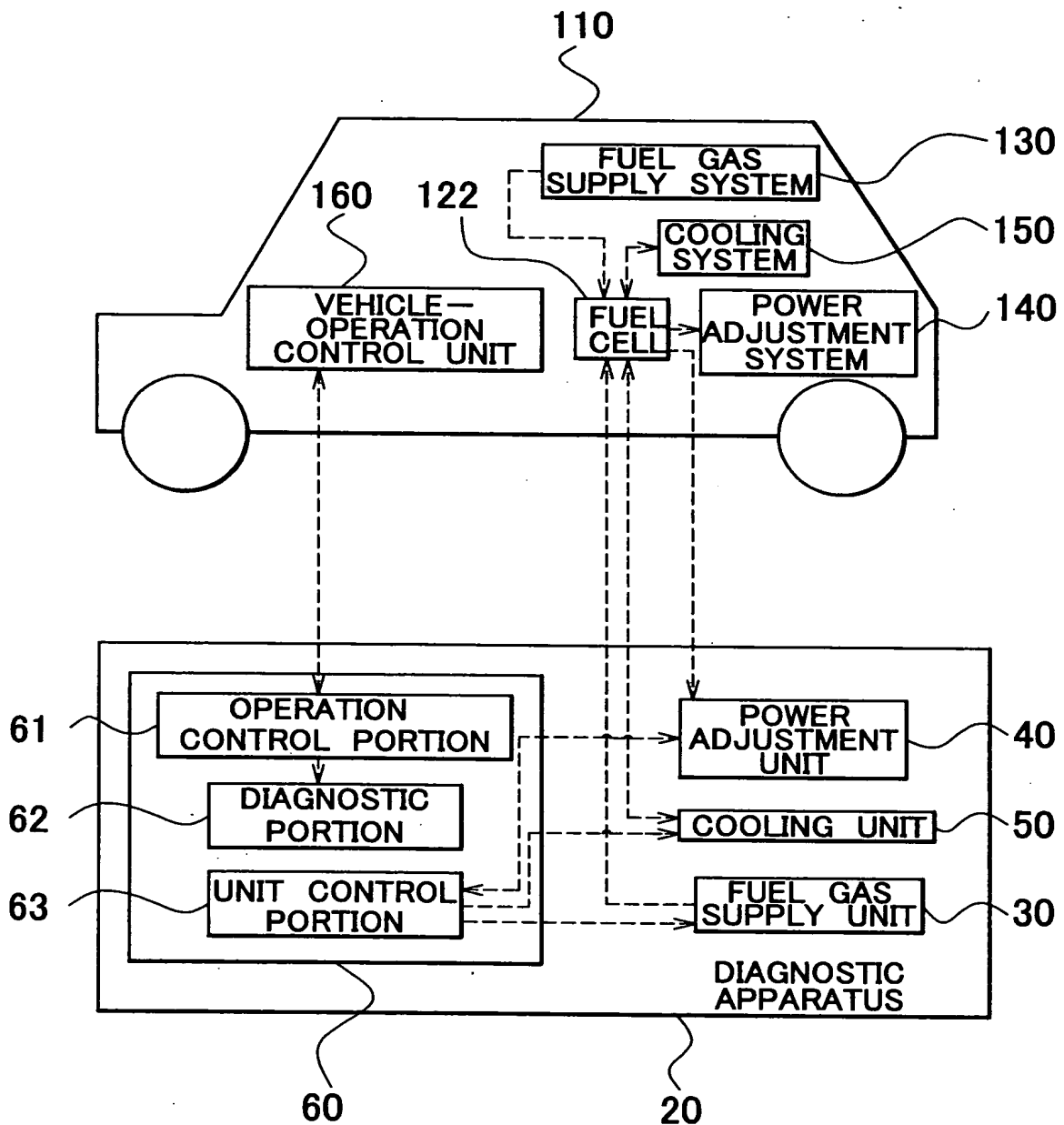


# FIG. 1



# FIG. 2

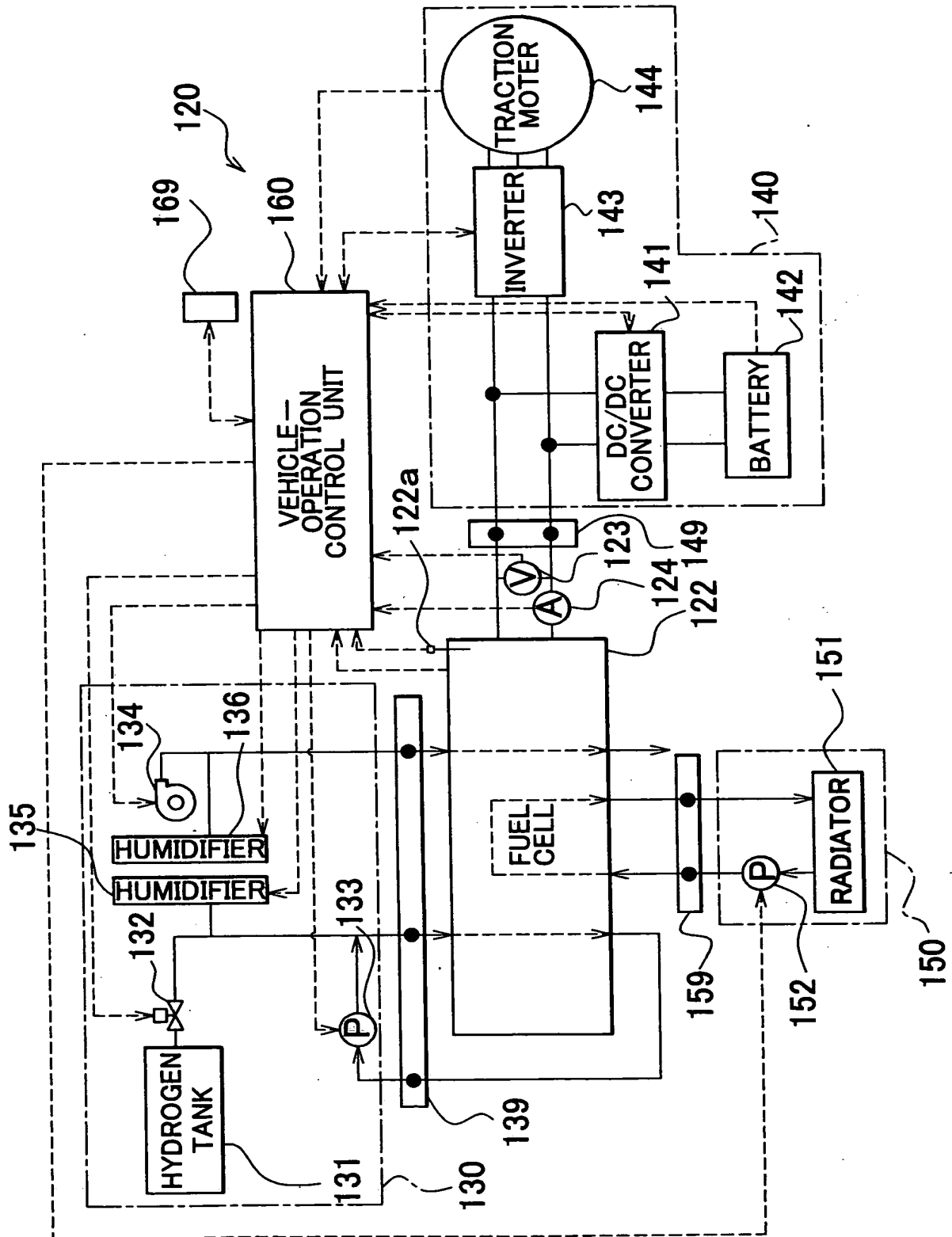
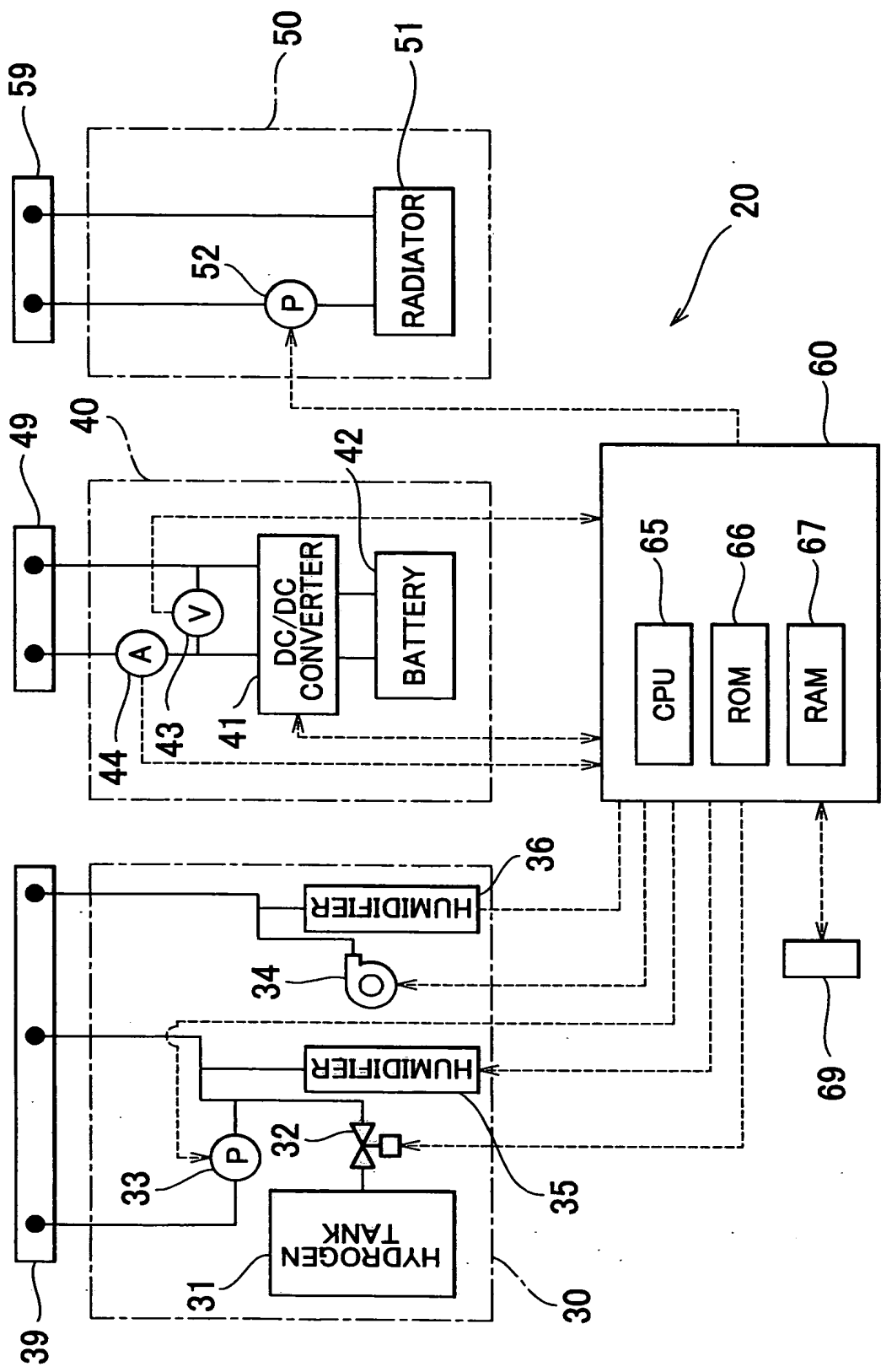
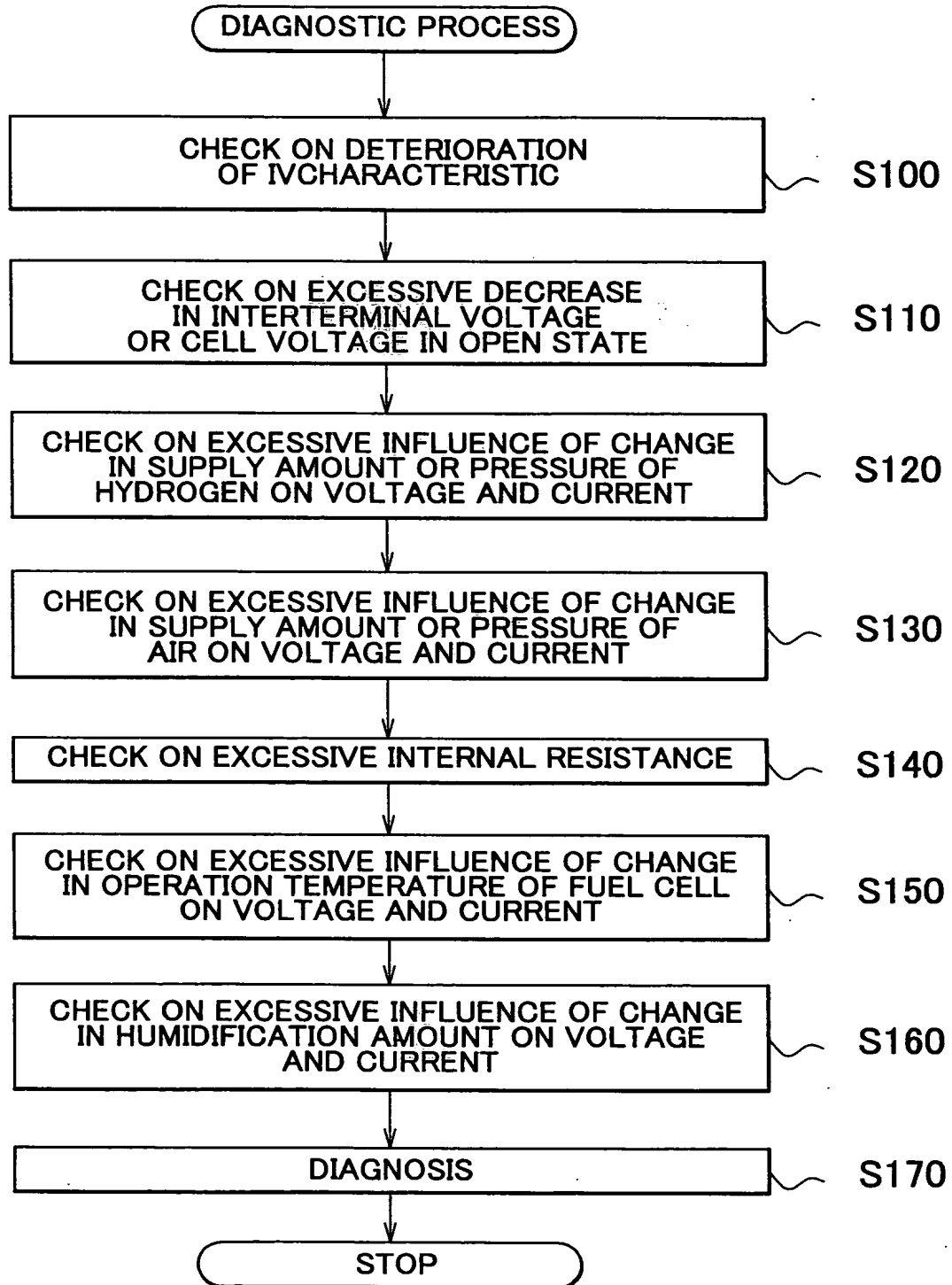


FIG. 3



# FIG. 4



# FIG. 5A

	DETERIORATION OF IV CHARACTERISTIC (BETWEEN TERMINALS)	DETERIORATION OF IV CHARACTERISTIC (DECREASE IN VOLTAGE IN CELL)	DECREASE IN CELL VOLTAGE IN OPEN STATE	EXCESSIVE SPEED AT WHICH VOLTAGE IS DECREASED IN OPEN STATE WHEN GAS SUPPLY IS STOPPED	DECREASE IN INTERTERMINAL VOLTAGE IN OPEN STATE	EXCESSIVE INTERTERMINAL RESISTANCE
CROSS-LEAK DUE TO DETERIORATION OF MEMBRANE	x	O	O	O	Δ	x
DETERIORATION OF CATALYST	Δ	O	?	x	?	x
SHORT CIRCUIT INSIDE MODULE	x	?	O	O	x	x
CONTACT FAILURE OF CELL MONITOR TERMINAL	x	x	O	x	x	x
ABNORMALITY OF CELL MONITOR SUBSTRATE	x	x	O	x	O	x
CONTAMINATION (METALLICION)	x	O	x	x	x	x
INSUFFICIENCY OF AIR (SYSTEM SIDE)	O	O	Δ	Δ	Δ	x
INSUFFICIENCY OF HYDROGEN (SYSTEM SIDE)	O	O	Δ	Δ	Δ	x
DRY UP (INSUFFICIENT HUMIDIFICATION)	O	O	O	x	O	O
DRY UP (INSUFFICIENT COOLING)	O	O	O	x	O	O
CLOGGING WITH FOREIGN MATERIAL (ANODE)	x	O	Δ	Δ	Δ	x
CLOGGING WITH FOREIGN MATERIAL (CATHODE)	x	O	Δ	Δ	Δ	x
FLOODING (ANODE)	x	O	Δ	Δ	Δ	x
FLOODING (CATHODE)	x	O	Δ	Δ	Δ	x

# FIG. 5B

	EXCESSIVE INCREASE IN EXHAUST GAS TEMPERATURE IN AIR SYSTEM	EXCESSIVE INFLUENCE OF CHANGE IN AMOUNT OF HYDROGEN	EXCESSIVE INFLUENCE OF CHANGE IN SUPPLY AMOUNT OF AIR	EXCESSIVE INFLUENCE OF DIFFERENTIAL PRESSURE BETWEEN HYDROGEN AND AIR	EXCESSIVE INFLUENCE OF CHANGE IN HUMIDIFICATION AMOUNT	EXCESSIVE INFLUENCE OF CHANGE IN TEMPERATURE
CROSS-LEAK DUE TO DETERIORATION OF MEMBRANE	x	x	o	o	x	x
DETERIORATION OF CATALYST	x	x	x	x	x	x
SHORT CIRCUIT INSIDE MODULE	x	x	x	x	x	x
CONTACT FAILURE OF CELL MONITOR TERMINAL	x	x	x	x	x	x
ABNORMALITY OF CELL MONITOR SUBSTRATE	x	x	x	x	x	x
CONTAMINATION (METALLIC ION)	x	x	x	x	x	x
INSUFFICIENCY OF AIR (SYSTEM SIDE)	x	x	o	x	x	x
INSUFFICIENCY OF HYDROGEN (SYSTEM SIDE)	x	o	x	x	x	x
DRY UP (INSUFFICIENT HUMIDIFICATION)	x	x	x	x	o	o
DRY UP (INSUFFICIENT COOLING)	o	x	x	x	o	o
CLOGGING WITH FOREIGN MATERIAL (ANODE)	x	o	x	x	x	x
CLOGGING WITH FOREIGN MATERIAL (CATHODE)	x	x	o	x	x	x
FLOODING (ANODE)	x	o	x	x	o	o
FLOODING (CATHODE)	x	x	o	x	o	o

# FIG. 6

